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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,025	12/30/2003	Alpaslan Demir	I-2-0536.1US	8271
24374	7590	09/22/2004	EXAMINER	
VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,025

Applicant(s)

DEMIR ET AL.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-46 is/are allowed.
- 6) ☒ Claim(s) 1,2,11,12,21,22,47 and 48 is/are rejected.
- 7) ☒ Claim(s) 3-10,13-20 and 23-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 2, 11, 12, 21, 22, 47, and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,708,681 A to *Malkemes et al.* ("*Malkemes*") in view of U.S. Patent No. 6,650,691 B2 to *Cramer III* ("*Cramer*").

In making a proper obviousness rejection under MPEP 706.02(j), the examiner will address the following four steps:

- a) *the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line numbers where appropriate;*
- b) *the difference of differences in the claim(s) over the applied cited references;*
- c) *the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter; and*
- d) *an explanation why one skilled in the art at the time of the invention was made would have been motivated to make the proposed modification.*

As such to **claim 1**, for step (a) *Malkemes* discloses in figure 2 a reasonable but broad interpretation of a digital pre-distortion compensation module as part of the range compression 120, 121. The figure also shows real and imaginary parts as I and Q. An Analog radio transmitter with power amplifier is also shown as part of transmit power amplifier 160. As such, the controller is shown as part of signaling paths 170 and 171

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which are used to control the pre-distortion module (i.e., range compression 120, 121) and power amplifier 160 via gain control generation 180.

For step (b) *Malkemes* may be silent or deficient to the further limitation of specifically using a TPC signal. In particular, *Malkemes* discloses using a “transmit power control word” that acts like a TPC signal, however, it may not be clear from the description that the transmit power control word is generated by a base station, see e.g., column 4, lines 53-61 in view of column 5, lines 11-17 with respect to *any* method.

Cramer teaches the further recited limitation above at e.g., in the *background* of the patent, see e.g., column 2, lines 15-40.

For step (c), the proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Malkemes* by clarifying that a “transmit power control word” could be a TPC signal.

In order to establish a *prima facie* case of obviousness for step (d), three basic criteria must be met. The three criteria according to MPEP 706.02(j) are as follows:

First there must be some suggestion or modification, either in the reference(s) themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

As such, for step (d) examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the further limitation to a base station that is configured to generate a transmit power control signal. In particular, the motivation for modifying the reference or to combine the reference teachings would be to control the power at a mobile. In particular, *Malkemes* cures the above-cited deficiency

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by providing a motivation found at e.g., column 2, lines 15-40. Second, there would be a reasonable expectation of success since *Malkemes* discloses using any method, see column 5, lines 10-14. Furthermore, both references disclose power control. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claim 2**, a modem is taught as part of a quadrature symbol mapper/pulse shaping 110 in figure 2 of *Malkemes*.

As to **claim 11**, see similar rejection to claim 1.

As to **claim 12**, see similar rejection to claim 2.

As to **claim 21**, see similar rejection to claim 1. Examiner notes that it also would have been obvious to one skilled in the art to implement the combined invention as an integrated circuit as part of a design decision. The motivation would be a single and integrated implementation of the combined system.

As to **claim 22**, see similar rejection to claim 2.

As to **claim 47**, see similar rejection to claim 1.

As to **claim 48**, see similar rejection to claim 1.

Allowable Subject Matter

3. **Claims 31-46** are allowed.
4. **Claims 3-10, 13-20 and 23-30** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **US 20040166884A1** see figure 3 and figure 5 with respect to a TPC command where the TPC command is based on a threshold at the base station.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DWF

Derrick W. Ferris
Examiner
Art Unit 2663


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